

26. (new) A method of inhibiting the growth of a eukaryotic cell which comprises bringing the cell into contact with the polypeptide of claim 14 under conditions to provide for apoptosis.

27. (new) A method of inhibiting the growth of a eukaryotic cell which comprises bringing the cell into contact with the polypeptide of claim 16 under conditions to provide for apoptosis.--

REMARKS

Claims 1-13 have been canceled, without prejudice. Claims 14-27 have been added and are pending.

Applicants elect, with traverse the subject matter of Group I and the sequence of SEQ ID NO:2.

Reconsideration and withdrawal of the restriction and election requirements are respectfully requested.

Request for reconsideration of election of specific sequence.

Applicants request that the present application be examined to the extent that the polypeptide of SEQ ID NO:9, or in the alternative, SEQ ID NO:11, is considered.

SEQ ID NO:2 is shown by the inventors to have activity in inhibiting the binding of an E2F protein to an E2F DNA binding site. SEQ ID NO:2 contains 6 residues: WVRWHF.

The example on page 25 shows that positions 1 and 4 of SEQ ID NO:2 are required for this activity, and that position 6 was also a contributor to the activity. Substitutions at positions 2, 3 and 5 were demonstrated to have no effects.

SEQ ID NO:9 is the peptide WXXWXF, i.e. to a peptide of SEQ ID NO:2 in which the residues 2, 3 and 5 are substituted, in line with the teaching of the application.

SEQ ID NO:11 is the peptide WXXWHF, i.e. to a peptide of SEQ ID NO:2 in which only the residues 2 and 3 are substituted.

It is submitted that SEQ ID NO:9, or at the very least, SEQ ID NO:11, are sufficiently related to SEQ ID NO:2 to be included within the same elected group.

Furthermore, it is also submitted that for these sequences there is no undue search burden. Applicants have submitted a sequence listing in electronic format whose purpose is to allow the PTO to perform prior art sequence searches. There are numerous databases, many of them publicly accessible, which allow searching of simple degenerate strings of sequences without undue difficulty. The "corresponding increase in computer search time" required to search SEQ ID NO:11 compared to SEQ ID NO:2 is likely to be a matter of fractions of a second.

Indeed, the relative ease of search has been tested by the present assignee. Attached are two hits identified on the Prosite database (www.expasy.org/tools/scanprosite) searched with the query string: W[GAILVSTR][GAILVSTR]WHF. Search tools of this type can be, and are, used for searches of sequences comprising a limited amount of degeneracy without undue burden. This search is believed to have taken the assignee a matter of a few minutes.

It is also observed that in the traditional chemical arts, the PTO has no difficulty in searching chemical compound structures which can cover a much greater number of compounds than the related set of peptides of SEQ ID NO:9 or SEQ ID NO:11. For example, it is not uncommon to find a claim to a chemical structure with a least three substituent groups which might be, for example, independently from 1 to 6 alkyl or 2-6 alkenyl. This would cover more compounds than those of SEQ ID NO:11.

Thus, reconsideration of the sequence election requirement is respectfully requested to the extent that SEQ ID NO:9, or in the alternative, SEQ ID NO:11, represent a small genus related to the specific SEQ ID NO:2.

Request for consideration of the Group I/II election requirement.

The claims of Group I include claims which specify that the claimed peptides of the invention inhibit "the binding of an E2F protein to an E2F DNA binding site with an *in vitro* IC50 of less than 100 μ M". Thus a search of the peptide sequences of Group I will encompass a search for peptides with the activity specified.

The claims of Group II relate to a process which uses the peptides of Group I such that a consequence of their specified activity is achieved.

It is submitted that the subject matter of the two Groups of claims are thus related by the activity of the peptides. By analogy with the "traditional" chemical arts, the PTO permit claims to novel compounds with a medical activity (and/or compositions thereof) to co-exist with claims to their methods of use. A quick search of US patents issued with

the words "pharmaceutical" and "method" in their claims revealed over 13,000 issued patents. A random sample of these with combinations of product and method claims include claims 1 & 6 of 6,486,349, claims 1 & 23 of 6,486,199 and claims 1 & 52 of 6,486,210.

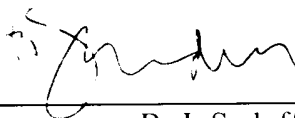
It is thus clear that any search of the products of Group I will take account of their specified and claimed activity, and thus there is no undue burden on the Examiner to consider the method claims of Group II in the same application. This approach is in keeping with PTO practice in the chemical arts.

Examination of all the claimed subject matter is therefore requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



B. J. Sadoff
Reg. No. 36,663

BJS:plb
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100